

INTERNATIONAL SEARCH REPORT

International Application No
PCT/JP2004/003443

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 E02F9/28

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 E02F E02D E01C E21C B23Q B25J B23P

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	PATENT ABSTRACTS OF JAPAN vol. 018, no. 062 (M-1553), 2 February 1994 (1994-02-02) -& JP 05 285766 A (FANUC LTD), 2 November 1993 (1993-11-02) abstract; figures 1,3-5	1-23
A	DE 299 02 127 U (LUDWIG DEMMELER GMBH & CO) 29 June 2000 (2000-06-29) figure 2	1-23
A	US 4 080 708 A (DECOMBE ALBERT ALPHONSE ET AL) 28 March 1978 (1978-03-28) the whole document	1-23
A	US 2002/104238 A1 (OLLINGER CHARLES GEORGE) 8 August 2002 (2002-08-08) figures 1,2	
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☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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Date of the actual completion of the international search

15 February 2005

Date of mailing of the international search report

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A	US 4 461 513 A (BERCHEM RUETGER) 24 July 1984 (1984-07-24) figures	
A	US 4 335 532 A (HAHN FREDERICK C ET AL) 22 June 1982 (1982-06-22) figures 1,2,5-8	
A	US 5 217 424 A (PALLMANN WILHELM) 8 June 1993 (1993-06-08) figures 1,4,5,7	

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